

GIASCOI, A. A.; SOLOVINSKIY, S. I.

Application of physical therapy following thoracic surgery in
pulmonary tuberculosis. Izv. Tuberk., Moscow No. 6, Nov. 1951
Page 59. No. 65

L. Of the Central Clinical Sosnovskiy Sanatorium of the Armed
Forces (Head-M. I. Miskelson, Colonel Medical Corps).

CLAL 20, 3, March 1951

GLASSON, A.A.

GLASSON, A.A.

Role of emergency surgery in pulmonary hemorrhage in tuberculosis.
Khirurgiia no.11:57-60 N '54. (MLRA 8:3)

(TUBERCULOSIS, PULMONARY, complications,
pulm. hemorrh., surg., emergency)

(LUNGS, hemorrhage,
in tuberc., surg., emergency)

(LUNGS, hemorrhage,
in tuberc., surg., emergency)

GLASSON, A.A.
GLASSON, A.A.

Late results of extrapleural pneumothorax and oleothorax. Klin. med.
32 no.12:33-37 D '54. (MLRA 8:3)

1. Iz khirurgicheskogo otdeleniya Tsentral'nogo Soanovskogo klinicheskogo sanatoriya.

(PNEUMOTHORAX, ARTIFICIAL
extra-pleural, late results)

(COLLAPSE THERAPY
oleothorax, late results)

GLASSON, A.A.

Modern requirements in surgical dissection of pleural adhesions
in tuberculous patients with artificial pneumothorax. [with
summary in English p. 151-152] Khirurgiya, 33 no.1:61-65
Ja '57 (MLRA 10:4)

1. Iz klinicheskogo sanatoriya Gadiach.
(PNEUMOTHORAX, ARTIFICIAL, compl.
pleural adhesions, surg.) (Rus)
(PLEURA, dis.
pleural adhesions after artif. pneumothorax,
surg) (Rus)

GLASSON, A.A. (Cherkassy (obl.), ul. Sverdlova, d.32)

Pulmonary resection in tuberculosis under sanatorium conditions.
Grud.khir. no.3:58-61 '61. (MIRA 14:9)

1. Iz torakal'nogo otdeleniya (zav. - A.A. Glasson) Sennovskogo
sanatoriya "Mayak" (glavnyy vrach Ya.G. Ostrovskiy).
(LUNGS—SURGERY) (TUBERCULOSIS)

GLASSON, K.

This needs an immediate decision. Prof.-tekh. obr. 18
no.8:29 Ag '61. (MIRA 14:9)

1. Predsedatel' metodicheskoy sekcii metallistov Kuybyshev-
skogo oblastnogo upravleniya proftekhobrazovaniya.
(Kuybyshev District--Evening and
continuation schools)

GLASSON, V.V.; TARAYEVA, T.I.

Investigating Troshkova clay. Trudy GIKI no.3:31-46 Vol. (MIRA 18:7)

GLASTOVETSKIY, Gennadiy Semenovich; NOVOFASHENNIY, G.N., red.;
FREGER, D.P., red. izd-va; BELOGUCHOVA, I.A., tekhn. red.

[Tuned parametric high-frequency amplifiers using transistor
diodes and their applications] Rezonansnye parametricheskie
usiliteli vysokoi chastoty na poluprovodnikovyykh diodakh i ikh
primeneniye; stenogramma lektsii. Leningrad, 1962. 30 p.

(MIRA 15:12)

(Parametric amplifiers)

KUZNETSOV, A.V.; GLATMAN, L.B.

Measuring the wear of cutters of sinking machines. Izv.
tekhn. no.4:12 Ap '60. (MIRA 13:8)
(Mining machinery)
(Mechanical wear--Measurement)

BARON, L.I., doktor tekhn.nauk; GLATMAN, L.B., gornyy inzh.; KUZNETSOV,
A.V., gornyy inzh.

Determining the abrasive properties of rocks mined with cutters.
Ugol' Ukr. 5 no.4:22-23 Ap '61. (MIRA 14:4)

1. Institut gornogo dela AN SSSR.
(Abrasion) (Coal mining machinery---Testing)

BARON, L.I., doktor tekhn.nauk, prof.; GLATMAN, L.B., gornyy inzhener;
SHLYAPIN, K.B., kand.tekhn.nauk

Evaluating the cutting resistance of rocks. Transp. stroi. 10
no. 12:42-45 D '60. (MIRA 13:12)

(Rocks)

GLASUNOV, E. A.

USSR/ Agriculture - Dissemination of Training literature

Card 1/1 : Pub. 77 - 30/21

Authors : Glasunov, E. A.

Title : Propaganda of advanced experience

Periodical : Nauka i zhizn' 21/9, page 47, Sep 1954

Abstract : The lack of access to sources of information is blamed for the backwardness of certain farming units and the situation is being improved by the distribution of booklets bringing to the farmers the benefit of the experience of others and knowledge obtained through scientific research.

Institution :

Submitted :

BRUSILOVSKAYA, D.; BURMISTROV, T.; GLASYRINA, L.; KARAULOVSKIY, N.;
KHODOROV, V.

In memory of V.M. Vasilevskii. Trudy Vses. ob-va fiziol., biokhim.
i farm. 3:166-168 '56 (MLBA 10:4)
(VASILEVSKII, VIKTOR MIKHAILOVICH, 1907-1954)

GLATENOK, I. V.

AUTHOR: Glatenok, I. V. (Moscow)

103-12-6/12

TITLE: Evaluation of the Domain for the Determination of the Real Periodic Solution, Determined by the Method of Harmonic Equilibrium (Ob otsenke oblasti nakhozheniya istinnogo periodicheskogo resheniya, opredelyayemogo priblizhenno metodom garmonicheskogo balansa).

PERIODICAL: Avtomatika i Telemekhanika, 1957, Vol. 18, Nr 12, pp.1132-1135 (USSR)

ABSTRACT: In the present paper the author succeeds to prove, that for the differential equation $\dot{y} = f(y, \dot{y})$ a stable periodic solution exists in the case of certain limitations of the function $f(y, \dot{y})$ (which is not connected with its local linear approximation), if the method of harmonic equilibrium in application on this equation determines the periodic solution. It is shown, that the actual solution lies in a certain vicinity of the periodic solution, which is obtained according to the method of the harmonic equilibrium. The author succeeds to determine the dimensions of such a domain. This is done by the theorems mentioned here, without proving them. The proof of these theorems is to be published

Card 1/2

On the Use of Electronic-Mechanic Transmitters

119-12-5/16

a gas discharging double transmitter and finally the scheme of a probe control in a glow discharge transmitter. The high sensitivity of the mechantrons for the shifting of a movable electrode makes it possible that electronic-mechanic measuring apparatus of great exactness in the measuring of linear measures are produced. (Electron micrometers, automatic apparatus for the sorting of products according to their linear dimensions, electronic-mechanic manometers - fig. 2, a etc. -). In fig. 2 the scheme of such a use of a manometer for the speed control of liquids is represented, as well as the schemes of electronic-mechanic acceleration transmitters, also referred to as "akseletrony". A description follows. The electronic "akseletrony" can also be used for the recording of flight paths of freely moving machinery parts and mechanisms. By means of an electronic-mechanic temperature transmitter (see scheme in fig. 2, e) an exact control of temperature deformations of bodies is possible, as well as the finding of the expansion coefficient. Furthermore it is possible to produce exact apparatus for the measuring of high frequencies and high-frequency electromagnetic fields by using the mechantrons. There are 2 figures.

AVAILABLE:
Card 2/2

Library of Congress

AUTHOR: Glatenok, I.V. SOV/55-58-1-4/33

TITLE: On the Question of the Foundation of the Method of Harmonic Balance (K voprosu obosnovaniya metoda garmonicheskogo balansa)

PERIODICAL: Vestnik Moskovskogo universiteta, Seriya fiziko-matematicheskikh i yestestvennykh nauk, 1958, Nr 1, pp 39-52 (USSR)

ABSTRACT: With the method of harmonic balance let a periodic solution of the equation

$$(1) \quad \ddot{y} = f(y, \dot{y})$$

be determined approximately. When it can be asserted that there exists a rigorous periodic solution of (1) being stable and lying in a certain neighborhood of the approximation?

Theorem: Let the following conditions be satisfied:

- 1) $f(y, \dot{y})$ is two times continuously differentiable with respect to y and \dot{y} ;
- 2) $f''_{yy}(a \sin u, a \omega \cos u)$, $f''_{y\dot{y}}(a \sin u, a \omega \cos u)$, $f''_{\dot{y}\dot{y}}(a \sin u, a \omega \cos u)$ have a bounded variation on $[0, 2\pi]$;
- 3) the absolute value of the remainder series neglected by the harmonic balance is sufficiently small.
- 4) several Fourier coefficients satisfy certain inequations.

Card 1/2

On the Question of the Foundation of the Method of 30V/55-58-1-4/33
Harmonic Balance

Then (1) has a stable periodic solution, the amplitude of which
can be estimated from below and from above.

The conditions 3) and 4) are so numerous and their computational
proof is so extensive that the practical application of the
criterion seems to be very doubtful. Besides the estimation of
the frequency error is not given

There are 5 Soviet references

ASSOCIATION: Kafedra differentsial'nykh uravneniy (Chair of Differential
Equations)

SUBMITTED: June 28, 1957

Card 2/2

GLATKOV, I. I.

"On the Foundation of the method of Harmonic Balance."

Moscow Energetic Institute, Moscow

Paper presented at the Intl. Symposium on Nonlinear Vibration, Kiev, USSR,
7-19 Sep 61

SERGEYEV, N.P., gvardii polkovnik meditsinskoy sluzhby; GLATENOK, N.A.

Method for studying the pulse and respiration of fliers in
ascents in a pressure chamber. Voen.-med. zhur. no.8:58-62

Ag'58. (MIRA 16:7)

(PULSE) (RESPIRATION) (ALTITUDE, INFLUENCE OF)
(AVIATION MEDICINE)

GLATENOK, V.S.

An apparatus for measuring biologically active ultraviolet radiation. S. M. Chubinski, V. S. Glatenok and M. P. Borozkova. *Lab. Prakt. (U. S. S. R.)* 16, No. 2, 1-2(1041).—The proposed photochem. method for measuring the biologically active ultraviolet radiation is based on the coloration in the presence of ultraviolet rays of an alk. soln. of crystal violet leucocyanide and on its decoloration in the absence of these rays. A catalyst—a small amt of KOH or KCN—is added to increase the velocity of the decoloration. This makes the photochem. reaction reversible, and the same soln. can be irradiated repeatedly. The soln. is sensitive to the spectrum region of from 295 to 334 nm. Since the soln. is contained in a uvial glass bulb the short-wave sensitivity limit is detd. by the transparency of the glass and is displaced to 295 nm. The soln. is colored violet by irradiation with ultraviolet rays of 275-334 nm wave lengths. The degree of the coloration of the soln. is a criterion of the intensity of the ultraviolet rays. The reverse reaction (decoloration) is detd. by the amt. of the catalyst and the temp. The amt. of the catalyst is so chosen as to complete the reverse reaction at 18° in not less than 15-20 min. On the basis of physical investigations of the light-sensitive soln. an app. has been devised which consists of a receptive and a measuring part. The receptive part consists of the bulb filled with the light-sensitive soln. and the measuring part consists of a colorimeter consisting of a circular wedge gradually absorbing light, a prism and an eye-glass. The

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000500010012-2"

GLATENOK, V. S.

Gor'kiy All-Union Inst. for Experimental Medicine (-1974 -)

"Ultra-violet Irradiation of Sky according to the Data of Bi-Phot -Cell,"

Iz. Ak. Nauk SSSR, Geograf, i Geofiz., No. 6, 1973.

LIVSHITS, I. (UJ8AB); GLATER, S. (UJ8ABA)

QTN in the Pamirs. Radio no. 6:9-10 Je '63. (MIRA 16:7)

1. Starshiy inzh. svyazi Pamirskoy ekspeditsii (for Livshits).
2. Starshiy inzh. po ~~radio~~ tekhnicheskomu oborudovaniyu Pamirskoy ekspeditsii (for Glater).

(Pamirs--Radio operators)

(Pamirs--Amateur radio stations)

GLATMAN, I. N.

1A 12/49T69

USSR/Engineering
Peat Industry
Conveyors

Aug 48

"Operation of Machine Installation for Mechanized
Extraction, Removal, and Conveying of Cut Peat at
Gatchina Peat Enterprises," I. N. Glatman, Engr,
1½ pp

"Torf Prom" No 8

Describes training of personnel, preparation of
mechanized sites, organization of work, disadvantages
of each machine, and operational defects.

12/49T69

BERON, A.I.; GUBENKOV, Ye.K.; GLATMAN, L.B.

A three-component dynamometer. Izv.tekh. no.10:33-35 0'60.
(MIRA 13:10)
(Dynamometer)

JARON, L.B., prof., doktor tekhn. nauk; GLATHAN, L.B., gornyy inzh.;
CHUKAYEVA, Ye.V., red.; GEASIMOV, V.F., tekhn. red.

[Methodology of determining the coefficient of friction of rocks]
Metodika opredeleniya koefitsientov treniya gornykh porod. Ko-
lektsiya, Inst gornogo dela im. A.A.Skochinskogo, 1961. 104 s.
(MIRA 15:12)

(Rocks.-Testing)

SLATMAN, L. B., Cand. Tech. Sci. (diss) "Investigation of
Main Laws of Cutting Mining Rocks and Cutter Wear Applicable to
Operation of Shaft-sinking Combines," Moscow, 1961, 21 pp.
(All-Union Sc. Res. Inst. of Transportation Construction "TsNIIS")
220 copies (KL Supp 12-61, 26b).

GLATMAN, L.B. , inch.

Determining efficient parameters of cutting rocks from the
working face. Nauch. tekh. inst. gorn. dela 7:66-104 +61 (MIRA 15:1.
(Mining engineering)

KHRIPINA, L.A.; GLATMAN, L.B.

Experimental studies of the operation of various types of
cutters. Nauch. soob. IGD 12:146-155 '61. (MIRA 15:9)
(Mining machinery)

BARON, L.I., prof., doktor tekhn.nauk; GLATMAN, L.B., kand.tekhn.nauk;
SHLYAPIN K.B., kand.tekh.nauk

Intensity of dust formation in cutting rocks. Bor'ba s sil. 5:
111-115 '62. (MIRA 16:5)

1. Institut gornogo dela imeni A.A.Skochinskogo (for Baron, Glatman).
2. Tsentral'nyy nauchno-issledovatel'skiy institut transportnogo
stroitel'stva Ministerstva transportnogo stroitel'stva
(for Shlyapin).

(Mine dusts)

GLATMAN, L.B.

Determining the forces acting on the cutters of mining combines.
Nauch.sob.IGD 14:55-65 '62. (MIRA 16:1)
(Mining machinery) (Mechanical wear)

BARON, L.I.; GLATMAN, L.B.

Calculating the wear resistance of cutting tools by the abrasion
indices of rocks. Fiz. mekh. svoist., dav. i razr. gor. porod. no.
2:55-65 '63. (MIRA 17:1)

GLATMAN, L.B., kand.tekhn.nauk

Contact strength of rocks. Nauch. soob. IGD 21:117-124 '63.
(MIRA 17:2)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000500010012-2

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000500010012-2"

GLATMAN, V.

SMIRNOV, Ye.; GLATMAN, V.

Device for transporting damaged Moskvich, and M-20 automobiles. Avt.
transp. 35 no.1:34 Ja '57. (MLRA 10:3)
(Automobiles--Repairs)

NENITSESKU, K.D. [Nenicescu, K.]; GLATTS, A.M.; GAVET, M.; POGANI, Yu.

Syntheses of α -substituted β -keto esters. Izv. AN SSSR. Otd.
khim. nauk no. 2: 332-339 F '63. (MIRA 16:4)

1. Khimicheskiy institut Akademii Rumynskoy Narodnoy Respubliki,
Bukhrest.

(Esters)

(Carbonyl group)

GLATZ, A

Distr: 4E2c(j)/4E3d

A new rearrangement of phenyl alkanes. Rearrangements of diphenyl butanes. Constantin D. Nenitrescu and Alice Glatz (Chem. research center, Acad. R.P.R., Bucharest, Romania). *Acad. rep. populare Romina, Studii cercetari chim.* 7, 505-19 (1959). The 1,1-, 1,2-, 1,3-, and 2,2-diphenylbutanes, the 1,1-, and 2,2-dichlorobutanes, the 1,2-, 1,4-, and 2,3-dibromobutanes, and the phenylthiomobutanes (1-phenyl-1-bromo, 1-phenyl-2-bromo, 1-bromo-2-phenyl, 1-phenyl-3-bromo, 1-bromo-3-phenyl, 1-phenyl-4-bromo, and 2-phenyl-2-bromo) were prepd. and refluxed with $AlCl_3$ in CCl_4 soln. Intramol. rearrangements took place, both in the alkylating agent before the Friedel-Crafts reaction, and in the diphenylbutanes produced in the reaction. In the latter rearrangement, phenyl groups tended to migrate toward or persist in the 1-position, in agreement with previous observations made in the monophenylalkane series. Therefore, in most of the latter rearrangements, the product was mostly 1,1-diphenylbutane; second in order of stability was *meso*-2,3-diphenylbutane. (28 references). (Summaries in Russian & English). M. Lapidet

4
1-266 (811)
1-266 (111)
1-266 (111)
2

POGANY, I.; GLATZ, Alice; BANCUI, M.

Equipment for acetone production. Rev. chimie Min. petr. 14.
no. 11/12 1963-64. H-D 63.

7. Secția de chimie organică a Centrului de cercetări chimice
al Academiei R.P.R., București.

ATK, Milan 17., 66., 6467, 6468, 196.

Present state and development of the production of thick clad plates and their properties. It. J. Hut Listy 18 no.3:562-566, Apr. 1973.

1. Vitebnike pol-durny Elena Gotsvalda, n.p., strana.

GLATZ, Janos

The 1962 Leipzig Fair. Magyar Kiserles 6 no. 14. Nr 162

GLAUPEF A. Nyomorekok rehabilitacioja Rehabilitation of the cripple Iparegeszsegugy, Budapest 1949, 2/4 (28-34)

Exercises should be commenced in the course of treatment, both during and after recovery.

The two methods are Swedish gymnastics and occupational therapy. One should aim at preserving the muscular function and the motility of the joints, strengthening the weakened muscular system, reactivating stiff parts and restoring neuromuscular coordination. The actual occupational therapy, consisting in basket making, weaving, the making of nets, light carpentry, gardening, domestic work, etc. should be preceded by light tasks which should principally serve to divert the patient. The purpose of rehabilitation is to shorten the time between clinical recovery and re-employment.

So: Medical Microbiology and Hygiene, Section IV, Vol3, No 1-6

GLAUBER, A.

Ischio-femoral fixation of the hip joint. *Magy. sebészeti* 5 no. 4:
261-263 Nov 1952. (GLML 24:1)

1. Doctor. 2. Orthopedic Clinic, Budapest Medical University.

^B
GLAUDER, Andor, dr.

The results of open and body reposition of congenital dislocation of the hip. Magy. sebeszet 7 no.1:22-28 Feb 54.

1. A Budapesti Orvostudományi Egyetem Orthopaediai Klinikájának közleménye.

(HIP, disloc.

congen., surg. fixation, technics & results)

(DISLOCATION

hip, congen., surg. fixation, technics & results)

GLAUBER, Andor, dr.; BEREND, Endre, dr.

Problems of acrylate and vitallium arthroplasty in the hip joint.
Orv. hetil. 97 no.26:707-712 24 June 56.

1. A Budapesti Orvostudományi Egyetem Orthopaediai Klinikájának
(mb. igazgató: Glauber, Andor dr. egyet. docens.) közleménye.

(HIP, surg.

arthroplasty, acrylic endoprosth. & vitallium
capping, evaluation & indic. (Hun))

(ACRYLIC RESINS

coxarthroplasty, endoprosth., evaluation & indic. (Hun))

(VITALLIUM

coxarthroplasty, capping, evaluation & indic. (Hun))

GIAUBER, Andor, Dr.; SZILAGYI, Pal, Dr.; LENART, Gyorgy, Dr.

Use of bones stored in merthiolate. Orv. hetil. 98 no.49:1354-1356
8 Dec 57.

1. A Budapesti Orvostudományi Egyetem Orthopédiai Klinikájának
(mb. igazgató: Glauber Andor dr. egyet. docens) közleménye.

(BONE AND BONES, transpl.

preserv. in thimerosal solution (Hun))

GLAUBER, Andor, Dr.; BARTA, Otto, Dr.; VIZKELETI, Tibor, Dr.

Generalized periostosis. Orv. hetil. 99 no.2:61-63 12 Jan 58.

1. A Budapesti Orvostudományi Egyetem Orthopaediai Klinikájának
(mb. igazgató: Glauver Andor dr. egyet. docens) közleménye.
(BONE DISEASES, case reports
periostosis, generalized (Hun))

GLAUBER, Andor, dr.

Comments on the prevention of ulcus cruris. Borgogy.vener.
szemle 35 no.5:244-246 0 '59.

(VARICOSE ULCER prev & control)

GLAUBER, A., dotsent

Reposition arthrodesis in unilateral old hip dislocations. Ortop.,
travm.i protez. 22 no.3:22-24 '61. (MIRA 14:4)

1. Iz Kliniki ortopedii (zav. kafedroy -- dots. A. Glauber)
Budapeshtskogo meditsinskogo instituta.
(HIP JOINT--DISLOCATION)

GLAUBER, Andor

SECRET

MD

Orthopedic Clinic, Medical School, University of
Budapest (Budapesti Orvostudományi Egyetem
Orthopaedial Klinikaja)

Budapest, Magyar Traumatologia, Orthopaedia, és
Helyreallito Sebeszet, No 3, Aug 62, pp 169-174.

"Indication of Partial or Full Removal of the Patella
and its Surgical Results."

Co-authors:

SZILAGYI, Pal, MD, Orthopedic Clinic, Medical School,
University of Budapest

GLAUBER, Andor. dr.; JUBASZ, Jeno. dr.

Adamantinoma of the tibia. Magy. onkol. 7 no. 2:87-91 Je '63

1. Budapesti Orvostudományi Egyetem, Orthopaediai Klinika
és I. Kórház és Kísérleti Rákkutató Intézet.
(ADAMANTINOMA) (TIBIA)

GLAUBER, Andor, dr.; FENYVACH, Jozsef, dr.; SILAR, Pal, dr.

Our experiences with the anabolic hormone therapy in rickets patients. Gyermekgyógyászat 15 no.1:1-9 J '64.

1. * B. Budapesti Orvostudományi Egyetem Orthopaediai Klinikájának
(Igazgató: Glauber Andor dr. egyet. tanár) közleménye.

GLAUER, A.; RISKÓ, T.; NYUL-TÓTH, P.,; TOMORY, I., VINCZE, E.;
ECKHARDT, S.

On the diagnosis of bone tumors. Orv. hetil. 105 no. 28: 1338-
1340 12 JI '64

GLAUBER, Andor, az orvostudományi kandidátusa, egyetemi tanár

Present state of orthopedics and its future trends. Magyar Tud
71 no.8/9:518-525 Ag-S '64.

1. Budapest Medical University.

GLAUBER, A., prof. dr.

Habitual elbow dislocation. *Acta chir. acad. sci. hung.* 6 no.2:
147-151 '65.

1. Orthopaedische Klinik (Direktor: Prof. Dr. A. Glauber) der
Medizinischen Universität, Budapest.

GLAUBER, A.

On the classification of primary bone tumors. Acta chir. orthop.
traum. Cech. 32 no.4:303-304 Ag '65.

1. Ortopedická klinika v Budapešti (prednosta prof. dr. A. Glauber).

BODOS, J.; GLAUBER, A.; LENART, Gy.; RENEK, I.

Physical phenomena at the compression of bones. Acta chir. acad. sci. Hung. 6 no.4:413-416 1965.

1. Department of Orthopaedics (Director: A. Glauber), University Medical School, Budapest; Institute of Experimental Physics (Director: J. Bodo), University Technical School of Architecture and Communications, Budapest. Submitted January 15, 1965.

107-57-3-59/64

AUTHOR: Glauberman, A. (Voronezh)

TITLE: Increasing Input Resistance of a Voltmeter. Experience exchange
(Povysheniye vkhodnogo soprotivleniya vol'tmetra. Obmen opytom)

PERIODICAL: Radio, 1957, Nr 3, p 57 (USSR)

ABSTRACT: In avometer circuits with half-wave rectification, the universal shunt is usually permanently connected across galvanometer terminals. Introduction of an additional switch is suggested to disconnect this shunt when DC voltages are measured.

There is one figure in the article.

Card 1/1

USSR/Physics
Crystals - Lattices
Crystals - Structure

Apr 49

"Deformation of a Metal Crystal Lattice Near the Surface," A. Glanderman, Leningrad Polytech Inst, 4 pp

"Zhur Ekspert 1 Teoret Fiz" Vol XIX, No 4

Uses simplified representation of average density of an electron gas in each elementary "honeycomb" of metallic crystal, and an expression for additional electric potential occurring in the metal in connection with the presence of bound- 38/497108

USSR/Physics (Contd)

Apr 49

ary surface. Obtains formula for relative displacements of the ion lattices of the crystal network of a metal with a face-centered structure in directions perpendicular to the boundary plane. Makes correction for the value of surface tension in a metal, which is connected with deformation of the metal's crystal lattice near the surface. Submitted 1 Aug 48.

38/497108

Theory of the Surface Tension of Metals. A. E. Gulyaev (Zhur. Fiz. Khim., 1949, 23, (2), 115-123). [In Russian]. The surface tension is calculated for a metal regarded as a crystal lattice of spherical positive ions surrounded by an "electron fluid" obeying Fermi-Dirac statistics; account is taken of the disturbance in the electrostatic, exchange, and kinetic energies of electrons near the surface. The latter two factors yield a negative term in the surface tension. The formulae obtained for surface tension are, for a face lattice, $\sigma = (2\pi)^{1/2} 0.0074 \sqrt{1 - 2\pi/3 R_s^2} d^2$, and for a body lattice $\sigma = (2\pi)^{1/2} 0.0087 \sqrt{1 - \pi/3 R_s^2} d^2$, where σ = surface tension, d = half lattice constant, approximately $d/2$ = interatomic distance, z = effective number of free electrons/atom in electron fluid, and R_s = penetration. Comparison with experimental values for metals Al, Ag, Au, Pt, Cu, Fe (calculated for γ Fe, Al, Ni, and Fe show γ) and agreement, in all cases within a factor of 2 to 3.5.

Theory of Surface Energy of Heteropolar Crystals. (in Russian) A. E. Glauber, *Zhurnal Fizicheskoi Khimii* (Journal of Physical Chemistry), v. 23, Feb. 1949, p. 124-130.

Attempts to solve the above problem by the method formerly developed by the author for investigation of metallic crystals. Simple formulas are proposed for determination of the energy correction caused by deformation of the lattice close to the surface.

GLAUFERMAN, A. Ye

184T103

USSR/Physics - Semiconductors

1 Jun 51

"Theory of the Escape of Electrons From Metals
in an Electrical Field," A. Ye. Glauferman,
I. I. Tal'yanskiy, L'vov State U imeni I. Franko

"Dok Ak Nauk SSSR" Vol LXXVIII, No 4, pp 661-664

Considers contact of metal with crystalline semi-
conductor or dielec. Computes flow of electrons
issuing from metal in zone of cond of the crys-
tal with aid of tunnel effect. Cf. Zener,
"Proc Roy Soc." A 145, 523, 1934, and Guth,
"Phys Rev" 61, 339, 1942. Authors were assisted

184T103

USSR/Physics - Semiconductors (Contd) 1 Jun 51

by Ye. I. Frenkel', V. S. Milyanchuk, F. F.
Vol'kenshteyn, and S. I. Pekar. Submitted
2 Apr 51 by Acad M. A. Leontovich.

184T103

GLAUBERMAN, A. E.

184738

USSR/Electricity - Electrolytic Charge 11 Jun 51

"Theory of Systems of Electrically Charged Particles," A. E. Glauberman

"Dok Ak Nauk SSSR" Vol LXXVIII, No 5, pp 883-886

Derives formulas for anal of charge of coned electrolytic solns. Free energy of soln and its activity may be computed on this basis. Submitted by Acad M. A. Leontovich 2 Apr 51.

184738

IVES, A. L.

4
② *rem*
Correction to the Paper by A. E. Glazerman and I. I.
Tal'vansky on: The Theory of the Escape of Electrons from
a Metal in an Electric Field. A. E. Glazerman and I. I.
Tal'vansky (*Doklady Akad. Nauk S.S.S.R.*, 1957, 81, (2),
124).—[In Russian]. See M.A., 19, 440.—G. V. E. T.

11-26-54

S.A.
Sec 1

William L. Lang
of Liquids

532.7
7078. On the theory of nearest-neighbour order in
liquids. A. E. GLAUBMANN. Letter in *Zh. Eksp.
Teor. Fiz.*, 21, 249-50 (No. 2, 1952) in Russian.
A density formula is derived which takes account
of heat-vibrations of the atoms of the liquid; the

density thus depends on temperature T directly and
through the coeff. of structure diffusion D , whose
dependence on T is discussed semi-empirically.
J. LINDEN

GLAUBERMAN, A. YE.

215789

formula for approximation of binary function of distribution. Determines and analyzes the zero and 1st approximation. Received 1 Aug 51.

215789

"Zhur Eksper i Teoret Fiz" Vol XXII, No 5, pp 562-571

On the basis of N. N. Bogolyubov's method (cf "Problems of Dynamic Theory in Statistical Physics," 1946), analyzes a system of electrically neutral interacting ions. The presence of solvent is accounted for in the introduction of the dielectric constant into the law of ion interaction. Derives a general

USSR/Physics - Electrolysis

May 52

"Statistical Theory of Concentrated Solutions of Strong Electrolytes. I," A. Ye. GlauberMAN, I. R. Yushmanovskiy, Izv State U

GLAUBERMAN, A. YE.

USSR/Physics - Electrolysis

May 52

"Statistical Theory of Concentrated Solution of Strong Electrolytes. II," A. Ye. Glauberaman, I. R. Yukhnovskiy, Lvov State U

"Zhur Eksper i Teoret Fiz" Vol XXII, No 5, pp 572-578

On the basis of the previous work [see previous abstract] and general statistical conceptions, derives a formula for the activity coeffs which in the case of small concns passes into the familiar Debye law. Compares theoretical and exptl data. Received 1 Aug 51.

215T9C

GLAUBERMAN, A. E.

USSR:

theory of the dielectric properties of barium titanate in
stationary fields. A. E. Glauberman and A. P. Indenbush.
Zhur. Khim. i Teor. Fiz. 25:188-98 (1968); Science Adv.
64A, 704 (1968).--An approx. calcn. is made of the natural
field in BaTiO_3 and of the susceptibility below the Curie
point (T_c), on the basis of the existence of a covalent bond
between the Ti ion and one of the O ions when calcg. the
geometrical structure of the lattice. The qual. theory gives
the dependence of ϵ on temp. for $T < T_c$ and a value of T_c .
A general method of calcg. the dependence of ϵ on external
field and the dependence of the spontaneous polarization on
 T is outlined.

62

①

HA, GIBB, A. V.

"Exchange of Energies between Forward Motion and Molecular Oscillation and Rotation,"
Part 1, Jour. Amer. Chem. Soc., 83, No. 2, 1961

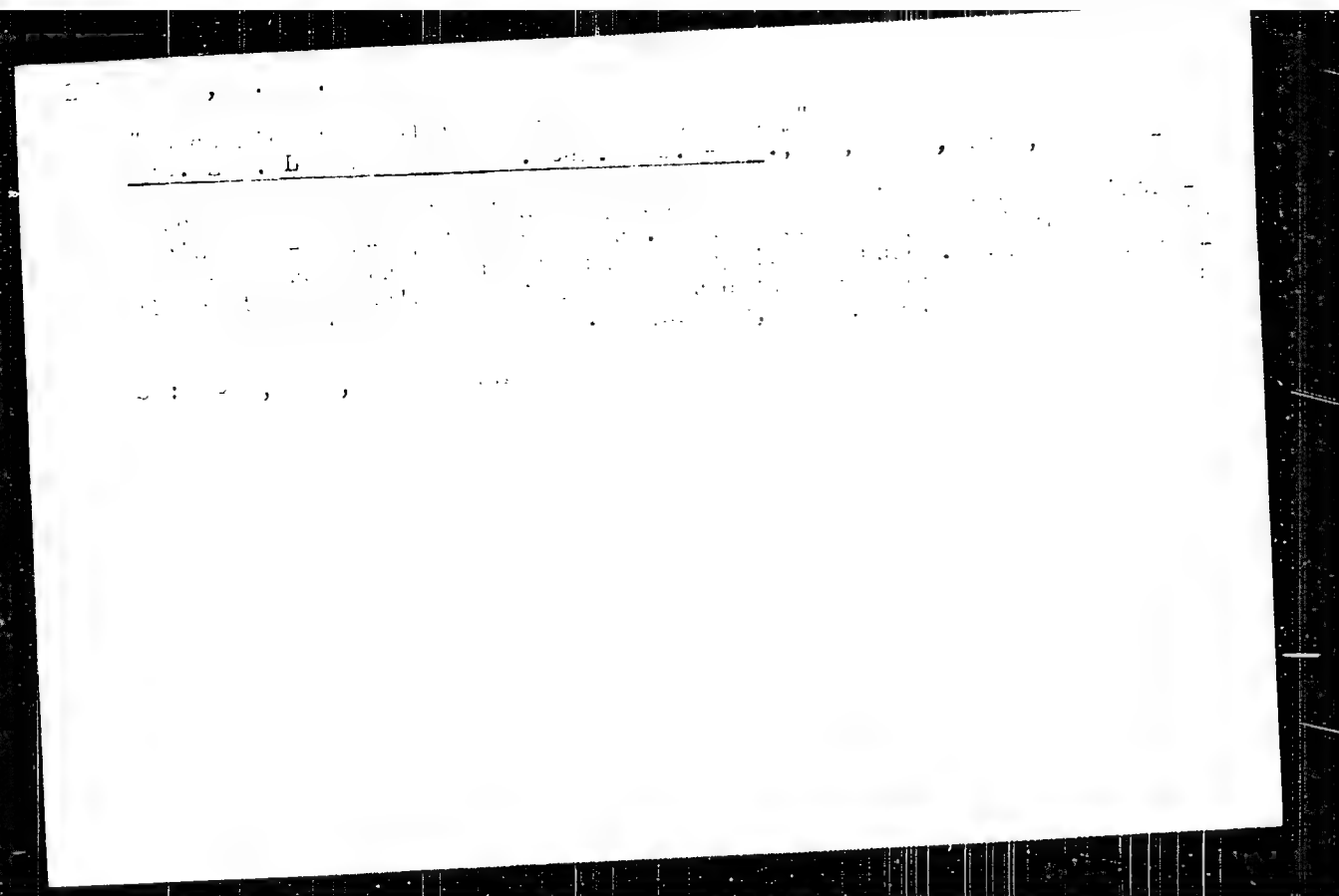
JMA December 1961

1. MAITSEMAN, A. YE., TROIAN, V. I.
2. USSR (600)
3. Collisions (Nuclear physics)
7. Exchange of energies between forward motion and molecular oscillation and rotation. Part II. Zhur. eksp. i teo. fiz. 4, no. 4, 1961.

9. Monthly List of Russian Accessions, Library of Congress, March 1961. Unclassified.

"APPROVED FOR RELEASE: 09/24/2001

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APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000500010012-2"

GLAUBERMAN, A. E.

math²
6

Mathematical Reviews
Vol. 15 No. 1
Jan. 1954
Mathematical Physics

7-13-54
LL

Glauber, A. E. On the derivation of the equations for the equilibrium functions of a distribution of molecules. Doklady Akad. Nauk SSSR (N.S.) 89, 659-662 (1953). (Russian)

The distribution functions of positions and velocities for groups of particles belonging to a system of interacting particles are defined and the continuity equation they fulfill is given in terms of the forces. Assuming that the equilibrium distribution is the product of a distribution function for positions and a distribution function for velocities, both time independent, one obtains the Maxwell distribution for velocities and the familiar integro-differential equation for the equilibrium distribution of positions. N. N. Bogolyubov, Problems of dynamical theory in statistical physics, Gostekhizdat, 1946; these Rev. 13, 196; M. Born and H. Green, A general kinetic theory of liquids, Cambridge, 1949; these Rev. 12, 230]. Justification of the above-mentioned assumption is said to fall beyond the scope of the note under review.

L. Van Hove (Princeton, N. J.)

GLAUBERMAN, A.Ye.; YUKHNOVSKIY, I.R.

"Superpositional" approximation in the theory of systems of interacting particles. Dokl.AN SSSR 93 no.6:999-1002 D '53. (MLHA 6:12)

1. Predstavleno akademikom M.A.Leontovichem.
(Particles) (Nuclear physics)

GLAUBERMAN, A. E.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 11/27

Authors : Glauberman, A. E., and Muzychuk, A. M.

Title : Surface tension of binary metallic alloys of volumetrically- and face-centered structures

Periodical : Zhur. fiz. khim. 28/9, 1615-1622, Sep 1954

Abstract : Formulas determining the surface tension of alloys of volumetrically- and face-centered structures, often encountered in nature, are presented. The theory of surface tension of binary alloys, based on the idea of quasi-heteropolarity of the lattice in the alloy, was applied for the calculation of the surface tension of binary intermetallic alloys of the above mentioned structures. The surface tension in the given formulas is expressed through values of effective charges characterizing the components of the alloys. Four USSR references (1949-1954). Drawings.

Institution : The Iv. Franko State University, Lvov

Submitted : December 25, 1953

GLAUBERMAN, A. E.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 12/27

Authors : Glauberman, A. E.

Title : The theory of surface tension of binary metallic alloys

Periodical : Zhur. fiz. khim. 28/9, 1623-1627, Sep 1954

Abstract : The formulation of a theory of surface tension for binary alloys based on the idea of quasi-heterogeneity of the metal atoms in the alloy, is reported. The case of a simple cubical structure was investigated and a simple formula for surface tension was derived. The quasi-heterogeneity of the lattice secures its stability in the case of the investigated alloy which is in contrast to the case of pure metals for which a simple cubical structure is practically impossible. Various points, in which the new theory should be improved, are listed. Seven references: 6-USSR and 1-USA (1936-1949).
Drawing.

Institution : The Iv. Franko State University, Lvov

Submitted : December 25, 1953

GLAUBERMAN, A. Ye

Category : USSR/Electricity - Dielectrics

G-2

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4119

Author : Glauberman, A.Ye., Stetsev, Ya.I.

Title : Concerning the Theory of the State of A Dielectric Prior to Breakdown.

Orig Pub : Fiz. zbernik L'vivsk. un-t, Fiz. sb. L'vovsk. un-t, 1955, vyp. 1, (6), 42-53

Abstract : An opinion is expressed, based on more detailed calculations of the probability of the breakaway of an electron from an atom by a strong electric field, that the tunnel-effect mechanism should be considerable in the breakdown of insulating crystals. The probability of the ionization of the atom in an electric field is estimated from calculations employing the usual equation in a one-dimensional field $U(x) = - (Z - s)^2 / |x| - eFx$, where Z is the atomic number and s the shielding constant. In the calculations, the barrier is approximated by a barrier having a straight-line section. The equations obtained give the increase in the ionization probability due to the tunnel

Card : 1/2

Category : USSR/Electricity - Dielectrics

G-2

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4119

effect at fields F of approximately 10^5 v/cm. The breakdown voltage depends strongly on the value of the ionization potential. In conclusion, the author gives an evaluation of the above one-dimensional model, using the two-dimensional potential $U = - (Z - s)^2 / \sqrt{x^2 + y^2} - eFx$, to show that the order of magnitude of the breakdown field does not change.

Card : 2/2

GLAUBERMAN, A.Ye.

Microscopic theory of the dielectrical properties of barium titanate. Dop. ta pov. L'viv. un. no.5 pt.2:69-71 '55. (MIRA 9:10)

(Barium titanates--Electric properties)

SLA DE EV DVA A 15

USSR/Physical Chemistry - Crystals; B-5

Abst Journal: Referat Zhur. Khim. No 19, 1966, 66883

Author: Glauberman, A. Ye.

Institution: NINE

Title: On the Question of Polarization of Ionic Shift in Complex Ionic Crystals

Original
Periodical: Dopr. Akad. Nauk SSSR, 1966, No 5, part 2, 71-73

Abstract: There has been evolved a rigorous scheme of calculations for determination of ionic shift in ionic crystals of arbitrary structure with any number of kinds of ions. Components of tensor of polarizability α_{ik} of ions of each kind (γ) in the general case depend upon components of vectors of effective fields E^{γ} acting upon the ions. A good approximation is the equating of all components α_{ik} with the anisotropy only at this approximation α_{ik} have constant values.

Card 1/1

GLAUBERMAN, A.Ye.; STETSIV, Ya.I.

Theory of the prebreakdown state of dielectric materials. Nauk. zap.
L'viv. un. 33:42-53 '55. (MIRA 10:6)
(Electric insulators and insulations) (Dielectrics)

GLAUBERMAN, A. E.

USSR/Physics - Electron spectra

Card 1/1 Pub. 22 - 12/54

Authors : Glauberman, A. E.

Title : ~~Regarding the theory of electron spectra of condensed systems~~
Regarding the theory of electron spectra of condensed systems

Periodical : Dok. AN SSSR 100/3, 449-452, Jan. 21, 1955

Abstract : A statistical study is made of interaction between an optical electron and particles surrounding it in condensed systems not having crystalline rearrangement (Effects of atoms with one optical electron or atoms, ions and molecules are considered). Eight references: 3 USSR. 1 Polish. 2 German and 2 French (1919-1952). Drawing.

Institution: Lvov Ivan Franko State University

Presented by: Academician M. A. Leontovich, October 21, 1954

D-3

USSR/Statistical Physics - Thermodynamics.

Abs Jour : Referat Zhur - Fizika No 5, 1957, 11387

Author : Glauber, A. Ye.

Inst : -
Title : Contribution to a General Theory of Statistical Equilibrium of a System of Interacting Particles.

Orig Pub : Zh. eksperim. i teor. fiziki, 1956, 30, No 6, 1084-1091

Abstract : The author proves that it is necessary to have a multiplicative structure of equilibrium distribution functions f_s of the dynamic states of aggregates of particles

$$\frac{\partial f_s}{\partial x} = 0, f_s(q_1, \dots, q_s, p_1, \dots, p_s) = \quad (1)$$

$$= \varphi_s(p_1, \dots, p_s) \psi_s(q_1, \dots, q_s).$$

where q determines the position of the particle, and p its momentum. The proof is obtained by constructive means with the aid of constructing the solution of the equations

Card 1/2

USSR/Statistical Physics - Thermodynamics.

D-3

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11387

$$[H_s; F_s] + \frac{1}{v} \int \left[\sum_{1 \leq i \leq s} \Phi_{i, s+1}; F_{s+1} \right] dq_{s+1} dp_{s+1} = 0,$$

where F_s is the asymptotic distribution function, normalized according to Bogoliubov, and Φ_{ij} is the mutual potential. The solutions are obtained by including the boundary conditions for the weakening of the correlation. The proof turns out to be formally correct for a mutual potential that diminishes with increasing distance between the two particles under consideration more rapidly than r^{-3} (the sufficiency of condition (1) was considered by the author earlier, See Dokl AN SSSR, 1953, 89, 659).

Card 2/2

USSR/Statistical Physics - Thermodynamics.

D-3

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 11391

Author : Glaubermin, A.Ye.

Inst : L'vov University

Title : Contribution to the Theory of Classical Systems of Interacting Particles with a Non-Central Interaction Law, I.

Orig Pub : Zh. eksperim. i teor. fiziki, 1956, 31, No 2, 218-223

Abstract : The author considers a generalization of the method by N.N. Bogoliubov to include a system of particles with non-central interaction law. Equations are obtained for the distribution functions of the aggregates of particles for a neutral potential of general form,

$$L_{ij} = L_{ij}(\underline{q}_i, \underline{q}_j, \underline{\varphi}_i, \underline{\varphi}_j, \text{ where } \underline{q}_i \text{ and } \underline{q}_j$$

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USSR/Statistical Physics - Thermodynamics

D-3

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11391

are the radius vectors of the centers of gravity of the molecules, and the angles ϑ_i, φ_i determine the orientation of the molecule axis. Two problems are considered in detail. The first problem concerns a real gas with a mutual potential of the form

$$U_{ij} = \Phi_{ij}(|\mathbf{r}_i - \mathbf{r}_j|) [1 + \lambda \Psi_{ij}(\vartheta_i, \varphi_i, \vartheta_j, \varphi_j, \vartheta_{ij}, \varphi_{ij})],$$

where Φ is the mutual potential of

the short-range central forces, ϑ_{ij} and φ_{ij} are angles that determine the orientation of the center lines, and λ is a small parameter. The second problem concerns a dipole lattice, i.e., a lattice, in which sites are located point dipoles and the mutual potential takes into account only the dipole interaction forces. In the latter case the lattice consisting of dipoles with dipole moments of

Card 2/3

USSR/Statistical Physics - Thermodynamics.

D-3

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11391

equal magnitudes is treated as a multi-component system. The type of the particle is determined by the vector of the lattice for the site in which the center of gravity of the particle is located. In the first problem, the distribution functions are constructed by expanding in powers of the density of the system and of the small parameter λ . In the second problem, the corresponding expansions are in powers of the small parameter $\chi = p^2/\Delta \epsilon$, where p is the magnitude of the dipole moment of the molecule, $\epsilon = kT$, and Δ is the volume of the elementary cell of the lattice.

Card 3/3

Category : USSR/Atomic and Molecular Physics - Liquids

D-8

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3563

Author : Glauberman, A.Ye., Tsvetkov, V.P.

Inst : L'vov University, USSR

Title : Concerning the Structure of Simple Liquids

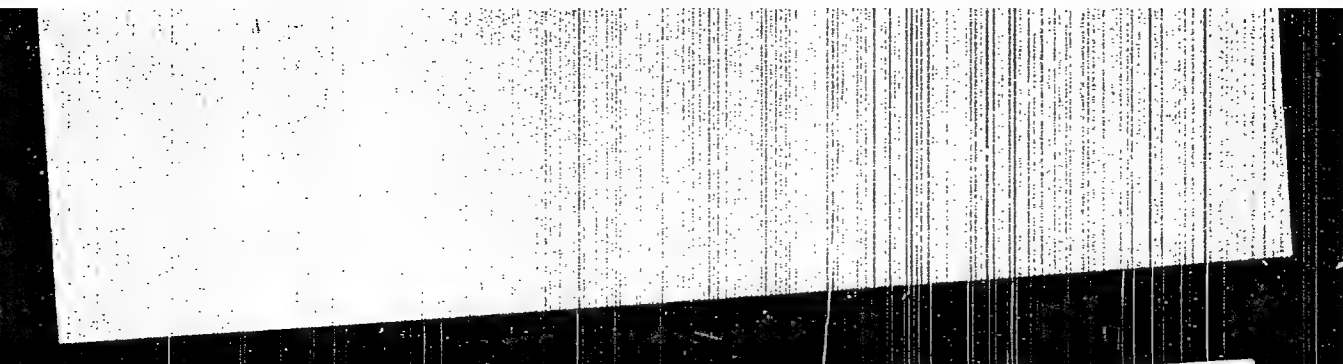
Orig Pub : Dokl. AN SSSR, 1956, 106, No 4, 623-625

Abstract : X-ray diffraction determinations of the functions of atomic distribution for simple liquids at various temperatures, as well as theoretical determinations of the radial distribution functions (Glauber A.Ye., Zh. eksperim i teor. fiziki, 1952, 22, 249), are used to determine the temperature dependence of the coefficient of structural diffusion. The calculation was carried out for liquid Sn.

Card : 1/1

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CARD 1 / 2

PA - 1972

SUBJECT USSR / PHYSICS
AUTHOR GLAUBERMAN, A. E.
TITLE On the Theory of the Real Gas with Non-Central Law of Interaction of Particles.
PERIODICAL Dokl. Akad. Nauk 111, fasc. 1, 63-66 (1956)
Issued: 1 / 1957

The author investigates a gas consisting of axially-symmetric molecules with constant electric (dipole- or quadrupole-) moment. The law of interaction of the two molecules is assumed to have the following form:

$$L_{ij} (|\vec{q}_i - \vec{q}_j|, \zeta_i, \varphi_i, \zeta_j, \varphi_j, \zeta_{ij}, \varphi_{ij}).$$

Here \vec{q}_i denotes the vector which determines the position of the molecular center of mass. ζ_i and φ_i are the angles which determine the orientation of the vector of the electromagnetic moment of the molecule in space; ζ_{ij} and φ_{ij} are the corresponding angles for the line of the centers (?) of the two investigated molecules. Next, BOGOLJUBOV'S equations for the distribution function of the particle complexes are given. The corresponding systems of equations can be solved by means of the usual development according to the powers of the density of the system in consideration of the conditions for the decrease of correlation. At first the solution in zero-th approximation is given, and then the equations for the first approximation of the s-th distribution function are investigated. The higher approximations are determined in a similar manner. In particular, the formulae for a dipole gas are given; the corresponding series for the distribution function

PA - 1972

CARD 2 / 2

Dokl.Akad.Nauk 111, fasc.1, 63-66 (1956)

of the particle complex show good convergence in the case of a sufficiently low density of the system. It is sufficient to know the unary and binary distribution function in first approximation in order to be able to compute the average potential energy of the system up to and including those terms which receive the small parameter to the square. With the aid of the average potential energy \bar{U}_N it is possible to express the corresponding part of the free energy in the usual manner and to determine all equilibrium characteristics of the dipole gas. In a similar manner the theory of a gas is developed which consists of molecules with a higher electric moment (e.g. quadrupole moment). From the formulae derived here it is easy to obtain the theory of a gas which consists of axially symmetric nonpolar molecules with weak orientation interaction. If a binary function that is accurate up to the first order is used, the properties of such a system which correspond to the equilibrium can be computed in satisfactory approximation. Thus it is possible quite easily to compute the second and third virial coefficient. This means that the method of the distribution functions of particle complexes permits the development of a rigorous theory of real gases in consideration of all forms of orientation interaction.

INSTITUTION: State University L'VOV (Lemberg)

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• L'vov. Universitet

Materialy X Vsesoyuznogo s'ezhda khimikov po spektroskopii. t. 1: Molekulyarnaya spektroskopiya (Papers of the 16th All-Union Conference on Spectroscopy. Vol. 1: Molecular Spectroscopy) [L'viv: Izd-vo L'vovskogo Univ.-ta, 1957. 499 p. 4,000 copies printed. (Series: *Izvestiya fizicheskoy khimii*, vyp. 3/6/).

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Candidate of Physical and Mathematical Sciences, and Gamberman, A.
A. Yes., Candidate of Physical and Mathematical Sciences.

Card 1/30

Chulanovskiy, V.M., M.P. Buzgova, G.S. Denisov, and Ye. L. Zhukova. Characteristics of Molecular Bonding in Nonelectrolyte Solutions Studied by Means of Infrared Absorption Spectra

42

Neporent, B.S., and V.P. Kiochikov. Dependence of the Absorption Spectra of Organic Vapors on the Concentration

51

Neporent, B.S., and N.O. Bakhtaliyev. Effect of the Solvent on the Value of the Absorption Integral for Complex Organic Compounds

52

Glauber, A. Ye. Theory of Electron Spectra of Condensed Systems

53

Aleksanyan, V.T., and Kh. Ye. Sterin. Raman Spectra of Bicyclo-2,2,1-heptane, Bicyclo-2,2,1-heptene-5, Bicyclo-2,2,1-heptadiene-2,5, and of Their Homologs

59

Card 5/30

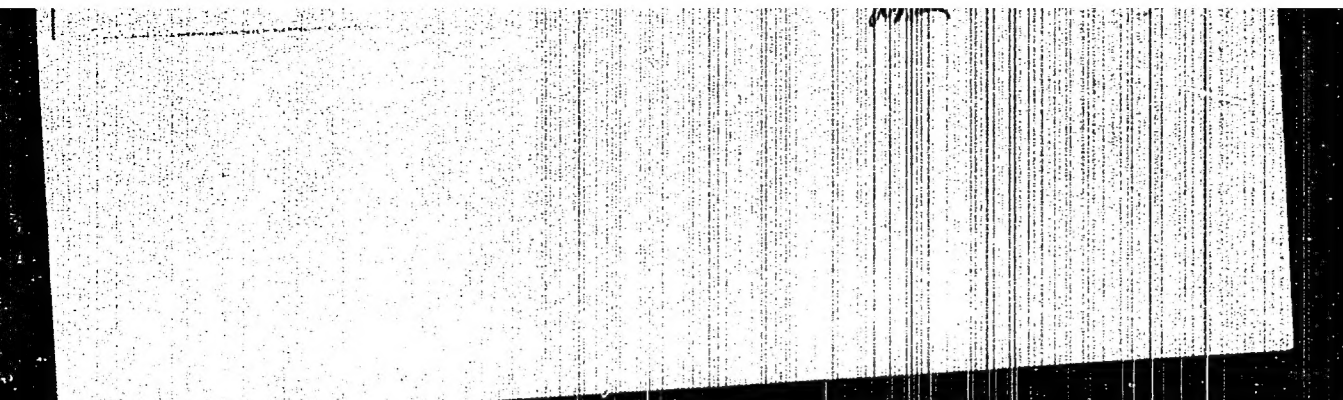
GIAUBERMAN, A.Ye.

Theory of electron spectra of condensed systems. Fiz. sbor. no.3:
53-58 '57. (NIRA 11:8)

1. L'vovskiy gosudarstvennyy universitet im. Iv. Franko.
(Systems (Chemistry)) (Statistical mechanics)

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89-7-4/32

AUTHORS:

Glauberman, A. Ye., Talyanskiy, I. I.

TITLE:

On the Distribution of Neutrons in Media with Fixed Properties at
a Cylindrical Division Boundary
raspredeleniye neytronov v sredakh s
zadannymi svoystvami pri tsilindricheskey granitse razdela)

PERIODICAL:

Atomnaya energiya, 1957, Vol. 5, Nr 7, pp. 25-27 (USSR)

ABSTRACT:

The present paper investigates two media divided by an infinite circular cylinder with the radius R . The media may differ from each other by their behavior towards neutrons and may consist of light nuclei (not heavier than iron) including hydrogen nuclei. A punctiform source of fast neutrons exists on the axis of the cylinder. The authors here determine the spatial distribution of the fast and the thermal neutrons in both media. For this purpose the slowing down of neutrons to thermal energies as well as the diffusion of the created thermal neutrons have to be investigated. As in this case the media containing hydrogen are investigated, the group theory with a small number of groups is a satisfactory approximation. The authors here confine themselves to investigating two groups of neutrons: the fast and the thermal. Within each group propagating of the neutrons in the medium is described

Card 1/2

On the Distribution of Neutrons in Media With
Fixed Properties at a Cylindrical Division Boundary

89-7-4/32

by a diffusion equation. At first the conception of the "slowing down cross sections" for fast neutrons is defined. The existence of the dividing boundary is taken into account here by the introduction of fictive sources located on this boundary. Next, the equations for the neutron fluxes in the media are written down and transformed. Because of the linearity of these equations the entire neutron flux φ can be represented in the form: $\varphi = \varphi_0 + \varphi_1$. Here φ_0 denotes the neutron flux produced by the sources, and φ_1 the neutron flux produced by the fictive sources. Next, the equations for φ_0 and φ_1 are written down; for their solution cylindrical coordinates are introduced. The solution is written down for the flux of the fast neutrons within the cylinder (which is produced by the source of the fast neutrons). The additional flows of the fast neutrons as well as the flows of the thermal neutrons are then determined. The results obtained here are suitable for developing a theory of the neutron core sampling ("karrotazh") of bore holes and for the determination of bottom dampness by means of the neutron method. There are 3 references, 2 of which are

Slavic.

December 26, 1956

Library of Congress

SUBMITTER:
AVAILABLE:
Card 2/2

1. Neutrons - Distribution - Mathematical analysis
2. Neutrons - Motion - Mathematical analysis